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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,839	12/19/2006	Jean-Luc Bernard	291090U/SOX PCT	7582
22850	7590	04/09/2009		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER ZHU, WEIPING	
			ART UNIT 1793	PAPER NUMBER
			NOTIFICATION DATE 04/09/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/580,839

Applicant(s)

BERNARD ET AL.

Examiner

WEIPING ZHU

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 1-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

Status of Claims

1. Claims 1-10 are currently under examination, wherein no claim has been amended in applicant's reply filed on December 30, 2009. Applicant's affirmation of the election with traverse of Invention I, Claims 1-10 in the reply filed on December 30, 2009 is acknowledged. The non-elected Inventions II and III, Claims 11-13 and 14-16, have been withdrawn from consideration by the examiner. The traverse is on the ground that no adequate reason and/or examples have been provided to support a conclusion of patentable distinctiveness between the identified groups and also, it has not been shown that a burden exists in searching the claims of the three groups. This is not found persuasive because the reasons for the restriction and establishment of the burden were stated clearly in the Office action dated December 1, 2008.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "free of molybdenum and/or tungsten" in line 2 of claim 1 renders claim 1 and all its dependent claims indefinite because it would not be clear to one of ordinary skill in the art if the phrase excludes both Mo and W or only one of them.

Furthermore, claims 1-4 and 6-10 are indefinite because they are directed to an alloy lacking proportions. See *Koebel v. Coe* (41 USPQ 759, D.C. 1939).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 06-240392 A.

With respect to claims 1-5 and 7-10, JP ('392 A) discloses a Co base alloy comprising by weight 22-37% of Cr, 5-15% of Ni, 0.1-5% of Hf, 0.005-0.1% of Zr, 5-12% of Ta, 0.22-1.2% of C, 0.01-2% of Si, 0.01-2% of Mn and the balance of Co with inevitable impurities (abstract). The contents of Cr, Ni, Hf, Ta, C, Si and Mn as disclosed by JP ('392 A) overlap the claimed contents respectively and the highest content of Zr as disclosed by JP ('392 A) is close to the claimed lowest content of Zr. A prima facie case of obviousness is established. See MPEP 2144.05 I. The claimed Fe content of less than 3% does not require the presence of Fe, because the claimed content also includes the 0%. The Hf/C ratio of JP ('392 A) would obviously overlap the Hf/C ratio as

claimed in the instant claim 6 because the contents of Hf and C as disclosed by JP ('392 A) overlap the claimed contents of Hf and C respectively. JP ('392 A) further discloses that Cr would dissolve in the matrix (i.e. Co) as a solid solution to enhance the elevated temperature oxidation resistance of the alloy (paragraph [0007], machine translation); and that Hf would form carbides in the alloy to increase the abrasion resistance of the alloy (paragraph [0009], machine translation).

3 Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP ('392 A) as applied to claim 1 above and in view of JP 09-157780 A.

With respect to claim 6, JP ('392 A) does not disclose the claimed Ti content. JP ('780 A) discloses a Co based alloy containing by weight 0.1-0.4% of Ti (paragraph [0021], orally translated by a USPTO translator). It would have been obvious to add by weight 0.1-0.4% of Ti to the alloy of JP ('392 A) in order to improve the high temperature strength of the alloy as disclosed by JP ('780 A) (paragraph [0021], orally translated by a USPTO translator). The content of Ti as disclosed by JP ('780 A) overlaps the claimed content of Ti.

Conclusion

4. This Office action is made non-final. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Weiping Zhu whose telephone number is 571-272-6725. The examiner can normally be reached on 8:30-16:30 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WZ
3/21/2009

/George Wyszomierski/
Primary Examiner
Art Unit 1793